

3rd Harmonic Monday Meeting Minutes

Date: May 15, 2006

Time: 10:30 A.M.

Place: ICB Trailer 157 Conference Room

Attendees (P=Present):

C. Antoine		H. Carter	P	E. Harms		A. Rowe	P
T. Arkan		C. Cooper	P	T. Khabibouline	P	N. Solyak	
P. Bauer		H. Edwards	P	D. Mitchell		C. Grimm	P
L. Bellantoni		M. Foley	P	D. Olis	P		
C. Boffo	P	C. Ginsburg		P. Pfund	P		

Minutes recorded by Dan.

Minutes are posted at: http://tdserver1.fnal.gov/dolis/39GHz_minutes.html

Minutes of the meeting

Chemistry/Processing

- Timer reported more results on first performance test on cavity-2. Showed Surface resistance v. Temperature (2.2 to 5K), Q v. Eacc, and Q v. mode plots. Results show improvement in surface resistance after 30minutes of processing. Integrated surface resistance about 10-20x's higher than specification. Timer reiterated non-flat field performance likely result of heating at cavity ends. Cells in center show good performance. Total etch so far on cavity-2 is about 110microns at equators and 180microns at irises.
- Helen to ask Ruben to make thermometry for measuring temperature of individual cells.
- Allan reports that nozzles on rinse wand changed from 0.4mm orifice diameter to 0.2mm. Results in higher jet velocities and improved drainage (less flow). Wand rinses HOM body adequately but formteil obstructs slightly.
- Allan reported visual inspection of cavity#2 revealed no visual defects, oxidation spots. Cavity ends up to first equator of first cell inspected with boroscope.
- Timer will repeat bead pull measurement, cavity will then receive inside etch of 10-20microns, HP rinse, and then another cold measurement.
- Helen reports John Reid will check power of TWT this week.

Helium Vessels

- Dry fit up of helium vessel on cavity-2 done. Discovered interference between vessel flange and conical flange on cavity. About 0.5mm to be removed from vessel flange ID. Vessel length to be reduced by about 2mm to accommodate shorter cavity then nominally designed. Chuck Grimm will correct drawing tolerancing.

Cavity Fabrication

- Mike reports work at JLAB continues. He'll extend PO date to end of August.
- Mike reports all bodies back at JLAB. Helen has asked Mike to continue to develop plan for repair of HOM body on cavity#1.
- Mike has weld dates Wed and Thurs next week at Sciaky for cavities #7 & 8. Expect one or the other complete by late June.
- Cristian reports RRR measurements on AES material is 380 to 420. Heat treatment shows no detrimental effect.

HOM Couplers

- We received one coupler from Ceramtec. It will be checked out in IB4. Of six fabricated, five leak at ceramic.
- Timer reports that Elvin sent drawings of modified JLAB coupler to JLAB for their review. Status unknown.

Input Coupler, Test Stand

- Helen reports that Test Stand likely to be setup at A0 (more convenient than transporting to A0).
- Dan to find a suitable storage space for couplers both pre and post-processing. A0 is crowded.

Blade Tuner

- Package on Harry's desk for approval.

Other business

- Chuck Grimm introduced to team. He's a designer that took a transfer from PPD.
- Chuck reports magnetic shield drawings should be detailed this week. Joining detail to be left to fabricator.
- Harry suggests a Fermilab person go to DESY to witness final assembly of 1.3 GHz cavity string into cryomodule.
- Helen reports that she has volunteered to develop cost estimate for Crab cavities for ILC.